ALTO SHAAM®

OPERATION & CARE MANUAL

VPE-30F

VAE-30F

VAE-55FS

VENTILATOR HOOD

MODELS: VPE-30F, VAE-30F, VAE-55F(S)

24•7 Your Service Hotline 1-800-558-8744

COOK/HOLD SERVE SYSTEMS by ALTO-SHAAM®

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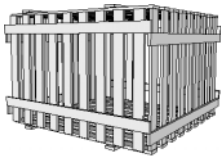
ALTO-SHAAM® — VENTILATOR HOOD & FRYER

DELIVERY



The Alto-Shaam ventilator hood has been thoroughly tested and inspected to insure only the highest quality unit is provided. When you receive your unit, check for any possible shipping damage and report it at once to the delivering carrier. See *Transportation Damage and Claims* section located in this manual.

The hood, complete with unattached items and accessories, may be delivered in one or more packages. Check to ensure that all items have been received as standard with each unit.

Save all the information and instructions packed inside the unit. Complete and return the warranty card to the factory as soon as possible to assure prompt service in the event of a warranty parts and labor claim.

This manual must be read and understood by all people using or installing this unit. Contact your local Alto-Shaam distributor if you have any questions concerning installation, operation, and maintenance of this unit.

NOTE: *All claims for warranty must include the full model number and serial number.*

UNPACKING

1. Carefully remove fryer with hood from the carton. NOTE: Do not discard the carton and other packaging material until you have inspected the hood and fryer for hidden damage and tested it for proper operation.

2. Read all instructions in this manual carefully before starting installation of this hood and fryer. Read and understand all labels and diagrams attached to the units.

DO NOT DISCARD THIS MANUAL. This manual is considered to be part of the unit and is to be given to the owner or manager of the business, or to the person responsible for training operators of the unit. Additional manuals are available from your Alto-Shaam distributor. This manual is to be used in conjunction with the manual for the fryer associated with this ventilator hood.

3. Remove all protective plastic film, packaging materials and accessories from the hood and fryer before connecting electrical power to the unit. Store accessories in a convenient place for future use.

The ventilator contains the following components:

1 fire suppression agent (Ansulex® R-102(HCS),1.5 gal)	1 fire suppression agent tank
1 fire supp. system charging cartridge	1 literature package
1 grease baffle	1 grease pan
1 charcoal filter (if ordered w/unit)	1 HEPA filter

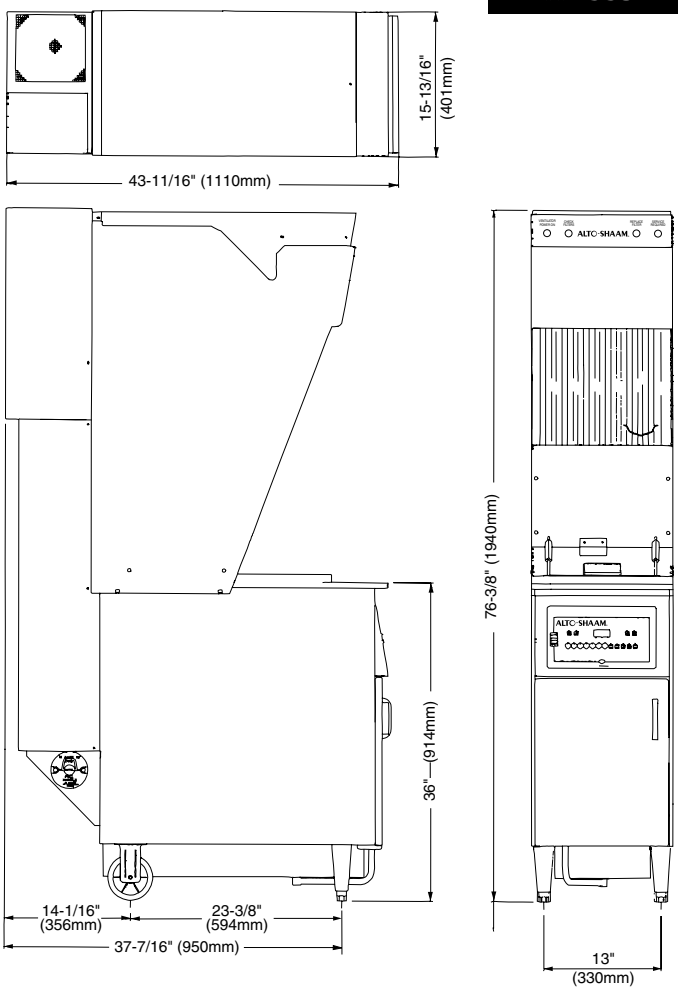
NOTE: *The ventilator hood is factory installed on the fryer. Both are shipped as one piece.*

SPECIFICATION INFORMATION

ELECTRICAL SPECIFICATIONS
The hood is wired into the fryer; use one hookup for both pieces.

MODEL	VAC	KW	AMPS 1PH	AMPS 3PH
VPE-30F	208	9.0	43.3	25 per line
	240	9.0	37.5	22 per line
	308-415	9.3	N/A	15-L1, 13-L2&L3
VAE-30F	208	9.0	43.3	25 per line
	240	9.0	37.5	21.7 per line
	308-415	9.3	N/A	14.3-L1, 13-L2&L3
VAE-55F(S)	208	17.0	N/A	47.8 per line
	240	17.0	N/A	41.0 per line
	308-415	17.4	N/A	26-L1, 24-L2&L3

DIMENSIONS VAE-55S



SAFETY PROCEDURES

Knowledge of proper procedures is essential to the safe operation of electrically energized equipment. In accordance with generally accepted product safety labeling guidelines for potential hazards, the following signal words and symbols are used throughout this manual.

Used to indicate the presence of a hazard which will cause severe personal injury, death, or substantial property damage in the event the statement is ignored.

Warning used to indicate the presence of a hazard which can cause personal injury and possibly death, or major property damage, in the event the statement is ignored.

Caution is used to indicate the presence of a hazard which will or can cause minor personal injury or property damage in the event the statement is ignored.

Used to indicate the presence of an electrical hazard which will or can cause personal injury or property damage in the event the statement is ignored.

NOTE Note is used to notify personnel of installation, operation or maintenance information which is important, but not hazard related.

Hazard Communication Standard (HCS)

The procedure in this manual may include the use of chemical products. These chemical products will be highlighted with bold face letters followed by the abbreviation (HCS). See the *Hazard Communications Standard* section of this manual for the appropriate Material Safety Data Sheet(s).

PRECAUTIONS & GENERAL INFORMATION

1. This ventilator hood system is designed as part of a deep fat fryer system. No other use of this product is authorized or recommended.

2. This ventilator and attendant fryer are intended for use in commercial establishments, where all operators are familiar with the appliance use, limitations, and associated hazards. Operating instructions and warnings must be read and understood by all operators and users.

3. This ventilator hood system is designed to reduce odor emissions, but will not completely eliminate cooking odors. Air exchange at the installation site must comply with the requirements of the local jurisdictional authority. To ensure that odors do not build up, recommended minimum air exchange is 400 cfm into and out of the site.

4. This equipment is made in the USA and has American size hardware.

5. Any trouble shooting guides, component views or parts lists included in this manual are for general reference only, and are intended for use by qualified technical personnel.

6. This manual should be considered a permanent part of this appliance. This manual and all supplied instructions, diagrams, schematics, part breakdowns, notices and labels must remain with the appliance if it is sold or moved to another location.

EQUIPMENT SET-UP PRECAUTIONS

1. Verify vertical clearances. Ventilator fryers require a minimum of 96" (floor to overhead) to allow for adequate air circulation.

2. Verify that the ventilator hood assembly is properly and securely assembled to the fryer before beginning the installation procedure.

3. If a remote pull station is to be used, replace the rear casters with fixed legs.

4. With a spirit level, adjust the fixed legs until the unit is level front-to-back, and side-to-side.

INSTALLATION & ELECTRICAL INFO

1. Installation and start up should be referred to the local Alto-Shaam distributor. Installer must complete the Warranty Registration/Fryer Checkout form and record fryer installation particulars on the back of this manual.

2. Make sure this installation is in compliance with the specifications listed in this manual, local code requirements and in accordance with the Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations, NFPA-96(current edition). This is the responsibility of the installer.

3. Certain codes require fryers to be restrained with a tether or other restraint device. It is the responsibility of the installer to check with the authority having jurisdiction in order to ascertain the applicability of this requirement to this specific fryer installation. Any restraint device must allow access to the back and sides of the unit to provide for servicing and maintenance, and must not interfere with the operation of the fire suppression system.

4. Refer to the name plate on the front of the unit. The electrical service power voltage and phase must match the nameplate specifications, and available electrical service amperage must meet or exceed the specifications listed. Wiring must be no less than 12 ga. solid copper wire, rated for at least 75°C.

ELECTRICAL SHOCK HAZARD

Electrical connections must be made by a licensed electrician. Electrical shock will cause death or serious injury.

NOTE: Wire gauge, insulation type and temperature rating, as well as type, size, and construction of conduit, must meet or exceed applicable specifications of local codes of the National Electrical Code.

4. Fryers are shipped from the factory wired for 3-phase service. Refer to 3-phase wiring diagram included with this fryer, and verify that field wiring conforms to this diagram.

NOTE: Fryers are field convertible to 1-phase. If single phase operation is required, refer to the 3-phase to 1-phase instructions included with the fryer, and verify that both internal wiring and field wiring conform to the included single-phase wiring diagram.

IMPORTANT: *Fryer Models VAE-55 and VAE-55FS units MUST NOT BE CONVERTED TO SINGLE PHASE OPERATION*. Conversion of these units to single phase operation invalidates the UL listing and voids the warranty.

FIRE SUPPRESSION SYSTEM INSTALLATION

FIRE HAZARD

DANGER

The fire suppression system must be charged and maintained by an authorized Ansul® distributor. Do not attempt to modify or bypass the fire suppression system. An uncontrolled fire can cause serious injury or death.

IMPORTANT

1. The fire extinguisher system must be set up and charged by an authorized Ansul® distributor.

2. The fryer is equipped with a manual pull station at the lower rear of the left side of the fryer. The manual pull station must be in a line of egress from the fryer. If the fryer is installed such that the factory installed location of the manual pull station is not in a line of egress, an additional remote pull station may be required by local codes. Any remote manual pull station must be installed by an authorized Ansul distributor in accordance with the authority having jurisdiction.

BURN HAZARD • SPILLED OIL

DANGER

The additional remote pull station must not be installed on the front and/or sides of the fryer, forward of the ventilator side panels. Dis-charge of the fire suppression system into hot oil will cause hot foam to spill over the frypot. Serious burns may result from this spillage and slipping and/or falling could result.

NOTE: If a remote manual pull station is installed, moving the fryer for servicing may cause the Ansul system to discharge. In this case, the unit must only be installed with four fixed legs (i.e., remove rear casters and replace with legs). Additional legs may be ordered through an authorized service agency.

3. The fire suppression system is comprised of a pressurized container of Ansulex® R-102 liquid fire suppression media, with associated plumbing and controls. It utilizes two fusible links for automatic actuation, and a manual pull station for manual actuation. Two nozzles are used to disperse the dry chemical fire suppression media.

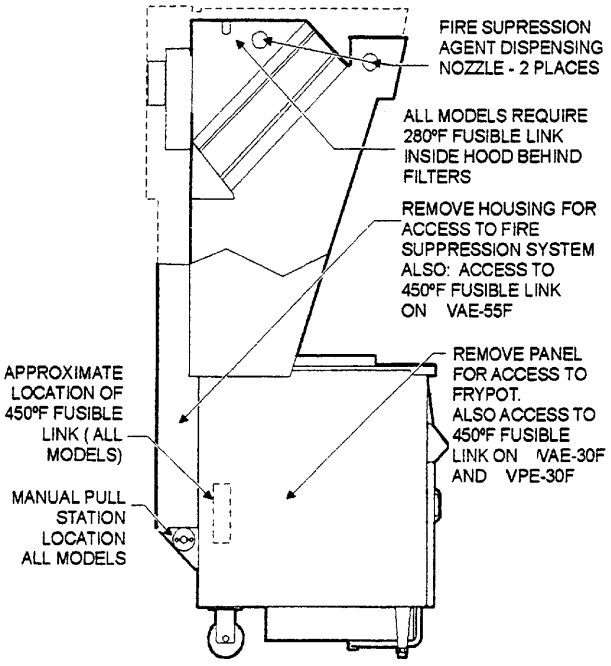
NOTE: If the fire suppression system is discharged, a buzzer will sound continuously. The fryer will remain inoperable until the fire suppression system is serviced, recharged and reset by an authorized Ansul® distributor.

Charging of the fire suppression system must be in accordance with Ansul® Design, Installation, Recharge and Maintenance Manual #418086.

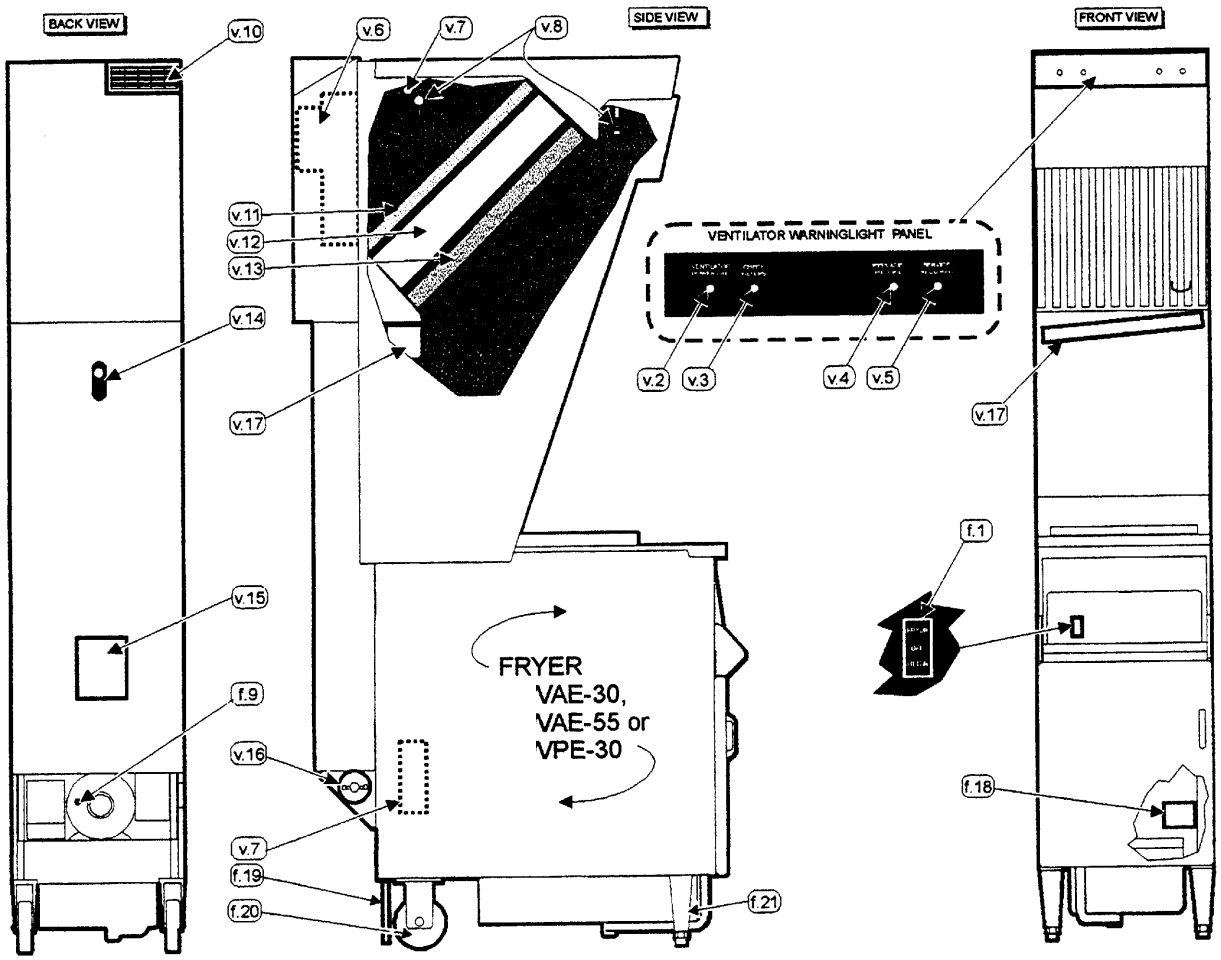
4. When the fire suppression system discharges, the fryer heating element(s) and controls are de-energized, and the fire suppression media is discharged. The fire suppression media will form an emulsion designed to both smother and cool the oil.

The primary 450°F fusible link is located on the frypot. This link will melt and discharge the fire suppression system should both the temperature control thermostat and the high limit control fail. The secondary 280°F fusible link is located in the filter plenum, and will protect against a fire in the plenum. Either link melting will discharge the fire suppression media through both nozzles, and cause a buzzer to sound.

NOTE: Exclusive Anti-Fire System....If the hi-limit detector fails and the oil temperature climbs above the safety limit, the fire suppression system will discharge, cooling the oil below the oil's (approximately) 540°F auto-ignition temperature, and preventing a fire from occurring.


FIRE SUPRESSION AGENT DISPENSING NOZZLE - 2 PLACES
ALL MODELS REQUIRE 280°F FUSIBLE LINK INSIDE HOOD BEHIND FILTERS
REMOVE HOUSING FOR ACCESS TO FIRE SUPPRESSION SYSTEM ALSO: ACCESS TO 450°F FUSIBLE LINK ON VAE-55F
REMOVE PANEL FOR ACCESS TO FRYPOT. ALSO ACCESS TO 450°F FUSIBLE LINK ON VAE-30F AND VPE-30F
APPROXIMATE LOCATION OF 450°F FUSIBLE LINK (ALL MODELS)
MANUAL PULL STATION LOCATION ALL MODELS

FEATURES & OPERATING CONTROLS



NOTE:

Items beginning with "f.." are part of the fryer.

Items beginning with "v.." are part of the ventilator.

f.1 Power Switch
Fryer position turns ON the ventilator power light and blower. If, within 10 seconds, there is sufficient air flow for proper operation, the power light will remain ON and the fryer will operate.

v.2 Ventilator Power
Turns ON when the fryer power switch is ON and adequate air flow has been proven.

v.3 Check Filters Light
Turns ON when grease baffle and/or HEPA air filter are not properly installed. When ON, the fryer heating elements are de-activated and the fryer will not heat.

v.4 Replace Filters Light
Will turn ON if either the HEPA air filter or charcoal air filter are due for replacement. The fryer will continue to operate, but the air filter(s) must be changed in a timely manner or the unit will clog, the service required light will turn ON, and the fryer will shutdown until the filter(s) have been replaced.

v.5 Service Required Light
Will turn ON and the fryer will shut down whenever there is insufficient ventilator air flow for proper operation.

v.6 Ventilator Blower
Provides air flow when running.

v.7 Fusible Link Locations
Provides fire protection by melting at a pre-determined temperature and activating the fire suppression system.

v.8 Fire Suppression Nozzle(s)
Disperses the fire suppression media.

f.9 Oil Filter Pump Motor Overload Reset
Provides over-temperature protection for filter pump motor. Must be manually reset by pushing in on the red button.

v.10 Ventilator Exhaust Collar
Allows for ventilator discharge. Do not block. Contains fire damper with pre-installed 165°F fusible link.

v.11 Charcoal Filter
v.12 HEPA Air Filter
v.13 Grease Baffle
See *Filters Installation* section in this manual.

v.14 Fire Suppression System Status Indicator
Indicates status of Ansul fire suppression system (i.e., Cocked or Fired).

v.15 Access to Autolift Motor
On VAE Model fryers equipped with automatic basket lift device.

v.16 Manual Pull Station
Allows manual discharge of fire suppression system.

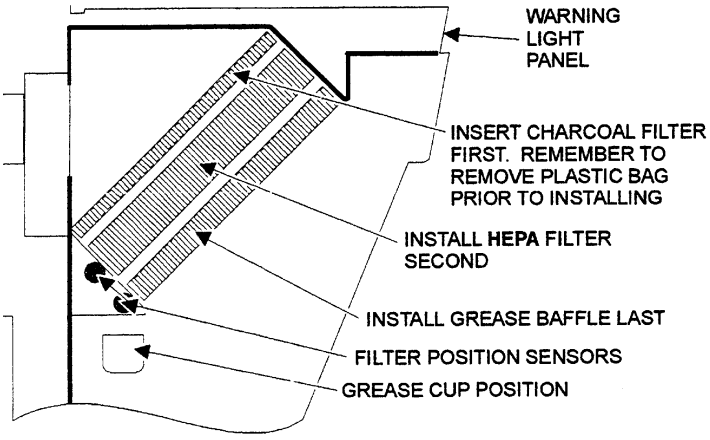
v.17 Grease Cup
Catches drippings from grease baffle.

f.18 Drip Pan
Catches any liquid draining from top of fryer.

f.19 Stabilizer
Prevents the unit from tipping backwards.

f.20 Rigid (rear) Casters
Allows the unit to be easily positioned by slightly lifting the front of the unit.
IMPORTANT: If a remote pull station is installed, both rear casters (f.20) must be replaced with legs to deter movement of the unit. *Moving an appliance with a remote pull station will discharge the fire suppression system.*

f.21 Fixed (front) Legs



FILTERS

Grease Baffle	(19-1/2 x 15-1/2 x 1-5/8)
HEPA Air Filter	(19-1/2 x 15-1/2 x 3-3/4)
Charcoal Filter *(optional)*	(19-1/2 x 14 x 7/8)

NOTE: The grease baffle and HEPA air filter actuate magnetic reed switches when they are in their proper positions. They must be properly installed or the fryer heating element(s) will not be energized.

1. Remove the protective plastic bag from the optional charcoal filter before installing.

WARNING: Installing the filter without removing the plastic bag will block the air flow. This will cause the ventilator to shut down 10 seconds after start-up and the fryer will not heat.

2. Note the air flow direction arrow on each filter, and verify that the arrow points toward the plenum when the filter is installed. Install the filters by inserting the top of each into the top filter support inside the hood assembly. Pivot the bottom of each filter toward the rear of the hood assembly and drop it into its respective bottom filter support. Seat each filter firmly into the bottom filter support.

Install the optional charcoal filter first, followed by the HEPA filter, then the grease baffle last.

GREASE CUP & DRIP PAN

1. Install the grease cup into the brackets below the grease baffle.

NOTE: Failure to install the grease cup will allow grease and moisture from the grease baffle to drop into the frypot, creating both a safety hazard (hot oil splatter) and a health hazard (contamination of the cooking oil).

BURN HAZARD • HOT OIL SPLATTER

Do not operate unless grease cup is installed. Moisture will drip into hot oil in the frypot causing hot oil splatter. Serious injury will result from contact with hot oil.

2. Install the drip pan into the mounting bracket behind the fryer door at the lower right front of the fryer.

NOTE: Failure to install the drip pan will allow grease, moisture, and other liquids that accumulate on the fryer top panel to drip onto the floor causing both a safety hazard and a health hazard.

SLIPPING & FALLING HAZARD • SPILLED OIL

Do not operate unless the drip pan is installed. Oil will drip onto the floor and falls will result. Death or serious injury may result from slipping and falling in spilled oil.

This manual is to be used in conjunction with the fryer manual supplied with this product.

Located on Fryer Control Panel

ITEM ❶

POWER SWITCH (FRYER-OFF-FILTER)

Fryer position turns on the ventilator, power light and the blower for 10 seconds.

If, within 10 seconds, there is sufficient air flow for proper operation, the ventilator power light will remain on and the fryer will operate.

If after 10 seconds, there is not sufficient air flow for proper operation, the blower and ventilator power light will turn off. The service required light will will turn on and the fryer will not operate.

The power switch must be turned off to recycle power before the fryer can be operated.

ITEM ❷

VENTILATOR POWER LIGHT (GREEN)

The ventilator power light turns on when the fryer power switch is on and air flow has been proven. Normally the ventilator light will be the only light illuminated on the ventilator warning light panel.

ITEM ❸

CHECK FILTERS LIGHT (AMBER)

The check filters light turns on when the grease and/or air filter are not properly installed. When the check filters light is on, the fryer heating element(s) is de-activated and the fryer will not heat.

If the check filters light illuminates, check both the grease baffle and HEPA filter for proper installation. Always replace the HEPA filter and charcoal filters at the same time.

When the check filters light is off, the fryer will operate normally.

ITEM ❹

REPLACE FILTER LIGHT (AMBER)

The replace filter light will turn on when the HEPA and charcoal air filters are due for replacement. The fryer will still operate normally, but the air filter must be changed in a timely manner or it will clog, the service required light will turn on, and the fryer will shut down until the air filters have been replaced.

ITEM ❺

SERVICE REQUIRED LIGHT (RED)

If the service required light illuminates, the fryer is shut down until the underlying clogged filter situation has been corrected. Normally, replacing both the HEPA filter and the charcoal filter will remedy the condition. Reset the unit by turing the power switch to OFF and then back to Fryer.

SERVICE POWER FAILURE

If the shutdown is caused by a service power failure, the fryer can be restarted by cycling the power switch to OFF and then ON.

VENTILATOR CLEANING INSTRUCTIONS

DAILY CLEANING

Exterior: At least once a day, wash the exterior with warm water, mild soap or detergent and a clean non-abrasive cloth. Rinse with clean, warm water and dry with a clean, non-abrasive cloth.

WEEKLY CLEANING

Remove the grease baffle, grease cup and drip pan. Empty the grease cup and drip pan. Wash and rinse the grease baffle, grease cup, and drip pan in the sink or dishwasher using mild grease detergent and warm water. Dry with a clean non-abrasive cloth.

MONTHLY CLEANING

Remove the HEPA filter and optional charcoal filter. Cover the frypot. Wash the interior of the ventilator with warm water, mild soap or detergent and a clean, non-abrasive cloth. Dry thoroughly with a clean, dry non-abrasive cloth.

REQUIRED MAINTENANCE

Use and maintenance shall be in accordance with the Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations, NFPA 96 (current edition).

NOTE: A signed and dated Fryer Hood Maintenance Log must be maintained on the premises, and shall be available for use by the authority having jurisdiction. *See sample in back of this manual.*

THREE MONTH MAINTENANCE

Clean the entire hood plenum and blower section.

SIX MONTH MAINTENANCE

1. Inspection and testing of total operation including fire damper and all safety interlocks shall be performed by qualified service personnel.

2. All fire suppression system actuation components including manual pull station and any remote manual pull station must be inspected for proper operation in accordance with the maintenance schedule published in Ansul® R-102 System Design, Installation, Recharge and Maintenance Manual (#418087).

3. On VAE Model fryers, open the rear cover access door and lubricate the lift worm threads with moly (molybdenum disulfide) grease.

ANNUAL MAINTENANCE

The fire suppression system fusible links must be replaced. Nozzles and manual pull station must be cleaned in accordance with Ansul® R-102 System Design, Installation, Recharge and Maintenance Manual (#418087).

TWELVE YEAR MAINTENANCE

The fire suppression agent tank and 1/4" flex hose must be hydrostatically tested, and the fire extinguishing agent must be replaced in accordance with the maintenance schedule published in Ansul® R-102 System (Standard UL300 listed). This maintenance to be performed by a qualified Ansul® service personnel only.

TROUBLESHOOTING

The filters are the only owner-serviceable components of the ventilator hood system. For all problems which cannot be remedied by servicing the filters, contact an authorized service agency for Fryer or Ventilator or an authorized Ansul distributor for the fire suppression system.

PROBLEM	REMEDY
Unit will not operate.	Circuit breaker is tripped. Reset breaker. If tripping persists, contact a licensed electrician for repair of field wiring or contact an authorized service agency for repairs.
A buzzer sounds continuously and unit will not operate.	Ansul® system has tripped. Contact an authorized Ansul® agent for service and repairs.
Check Filters light is lit.	HEPA filter missing or not in position. Make sure both the HEPA filter and grease baffle are properly installed in their respective rails.
Replace Filters light is lit.	HEPA filter or charcoal filter nearing the end of their service life. Be sure to have proper replacement filters on hand. Replace the HEPA filter and charcoal filter at the same time.
Service Required light is lit.	– HEPA filter or charcoal filter is plugged. Replace filters. – Fire damper on exhaust color has closed. Contact authorized service agency for repairs. – One or more vacuum sensing line(s) plugged. Contact an authorized service agency for repairs.

NOTE: If, after 10 seconds, there is not sufficient air flow for proper operation, the service required light will turn ON and the fryer will be de-energized. The power switch must be turned OFF to reset the system before the fryer can be operated.

SERVICE PARTS LIST

IMPORTANT

Use only a factory authorized service parts and replacement filters. Contact the Alto-Shaam factory for advice.

Normal Maintenance Items

Charcoal Filter
HEPA Air Filter
Grease Baffle
Leg Assembly

IMPORTANT

Parts used for the Ansul® fire suppression system are not serviceable by the owner/operator. Procedures for servicing fire suppression equipment are described in Ansul® R-102 System Design, Installation, Recharge and Maintenance Manual (#418087). This manual is intended for use by authorized service personnel only.

CUSTOMER SERVICE DATA

Business:_____ Location: _____

Installation Date:_____ Technician:_____

Service Company:_____

Address:_____

_____

Phone No.:_____

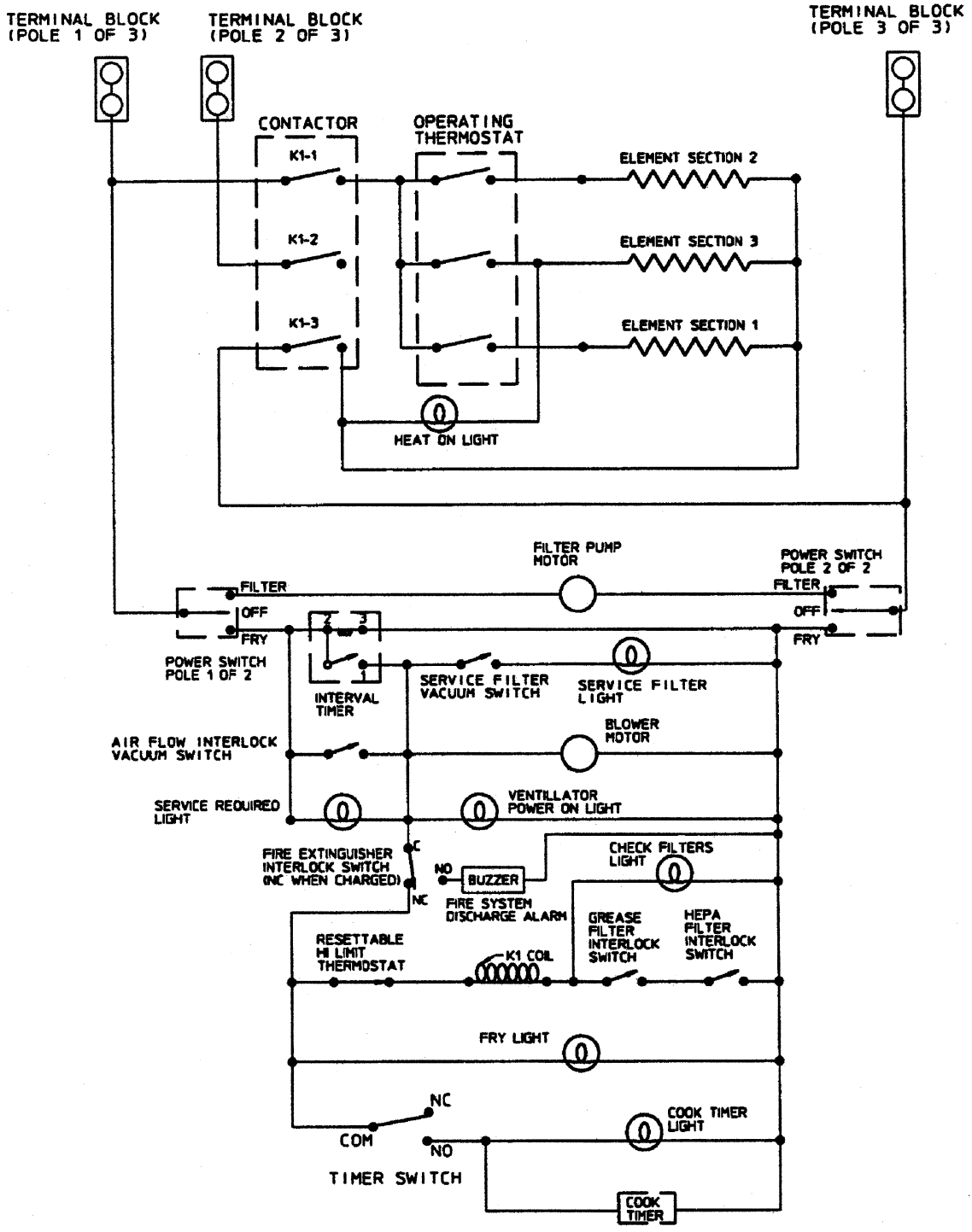
Equipment Model No.:_____

Equipment Serial No.:_____

Voltage: 208V 240V 308-415V

HAVE THIS INFORMATION AVAILABLE IF CALLING FOR SERVICE

VPE-30F WIRING SCHEMATIC
208V or 240V 1ø 9000 Watts



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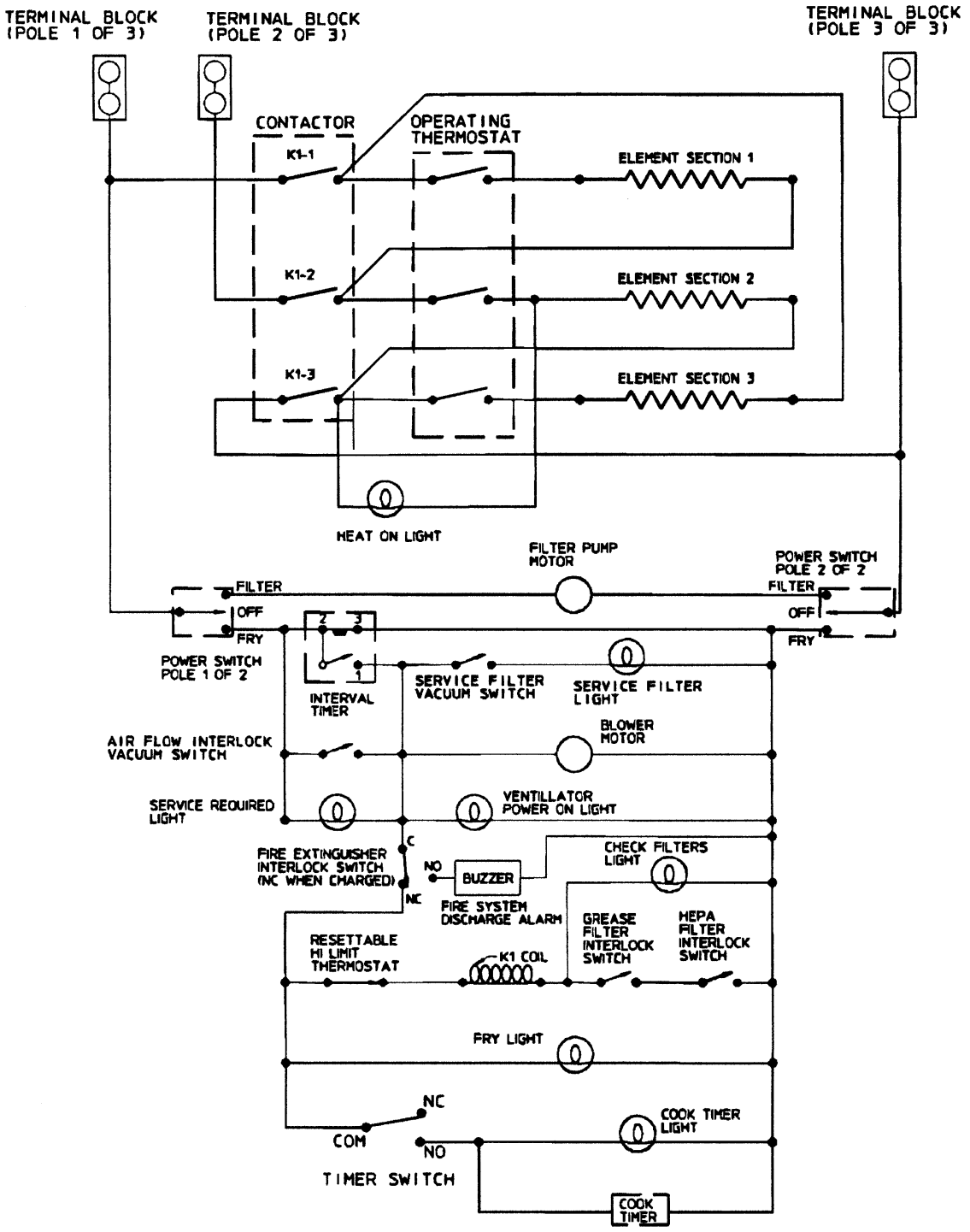
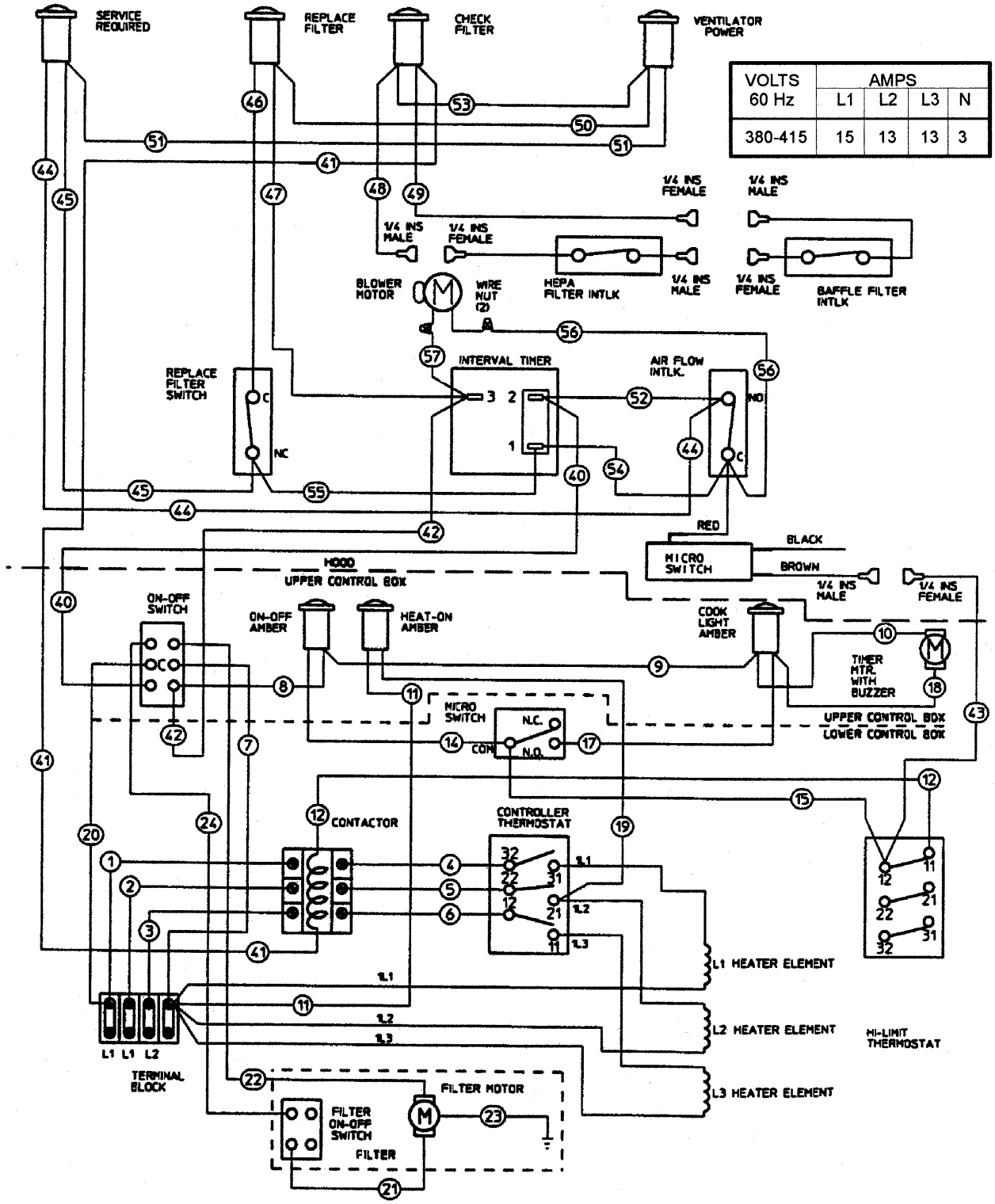
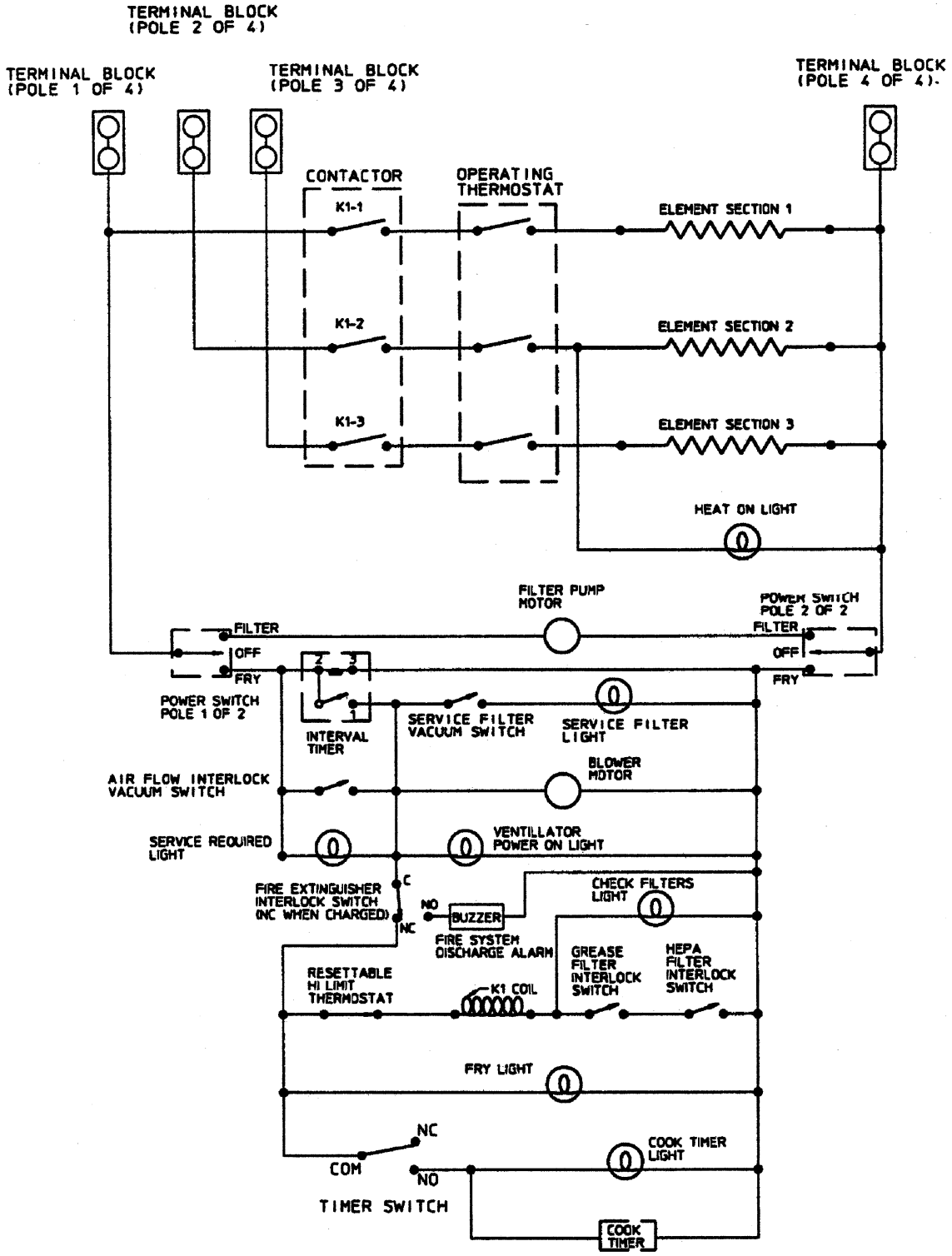
VPE-30F 3 Phase 208 or 240V



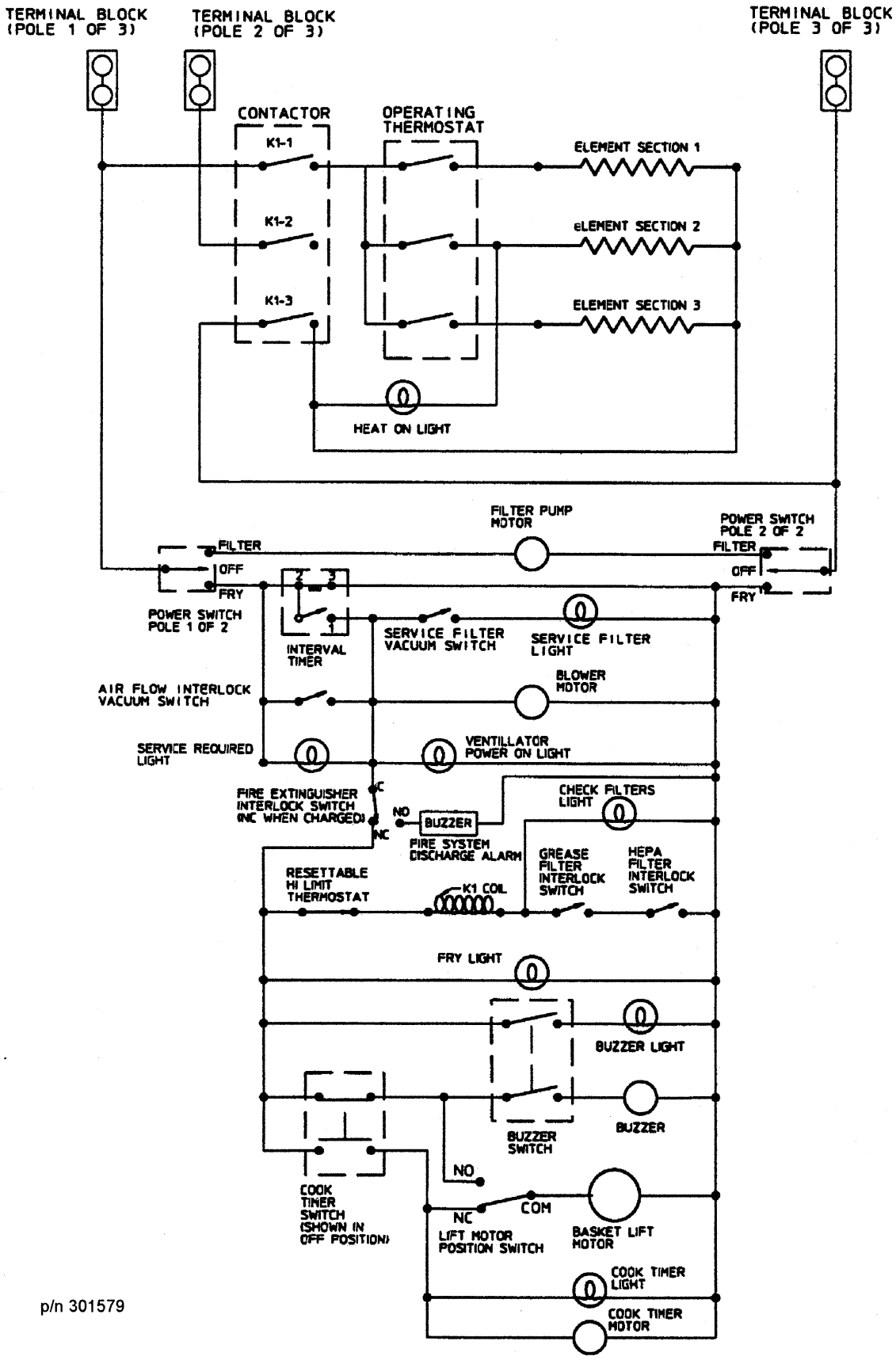
VPE-30F WIRING DIAGRAM
380 - 415 VAC 3∅ 3 WIRE + NEUTRAL



VPE-30F WIRING SCHEMATIC
380 - 415 VAC 3∅ 3 WIRE + NEUTRAL



VAE-30F WIRING SCHEMATIC
208V or 240V 1ø 9000 Watts



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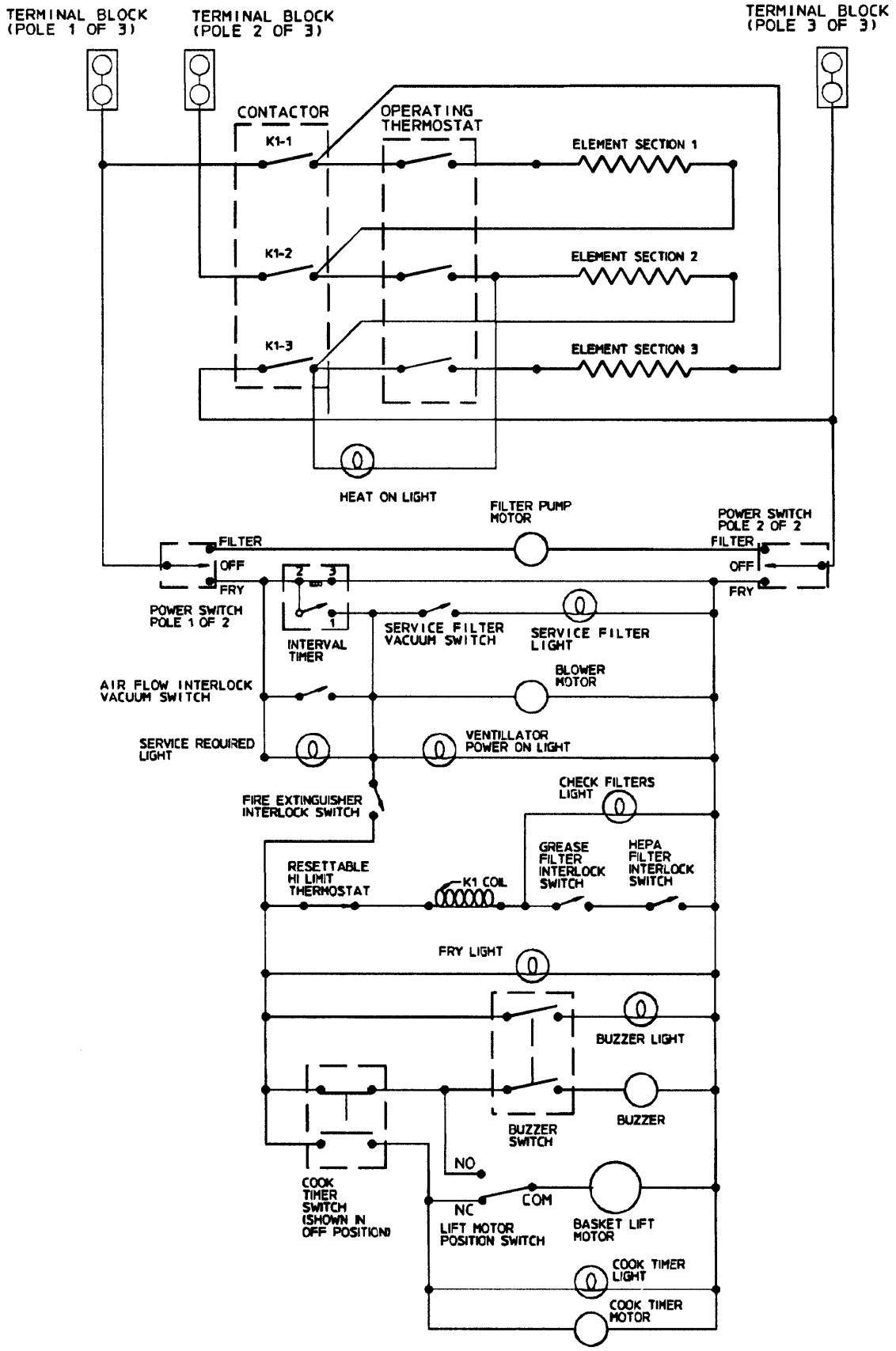
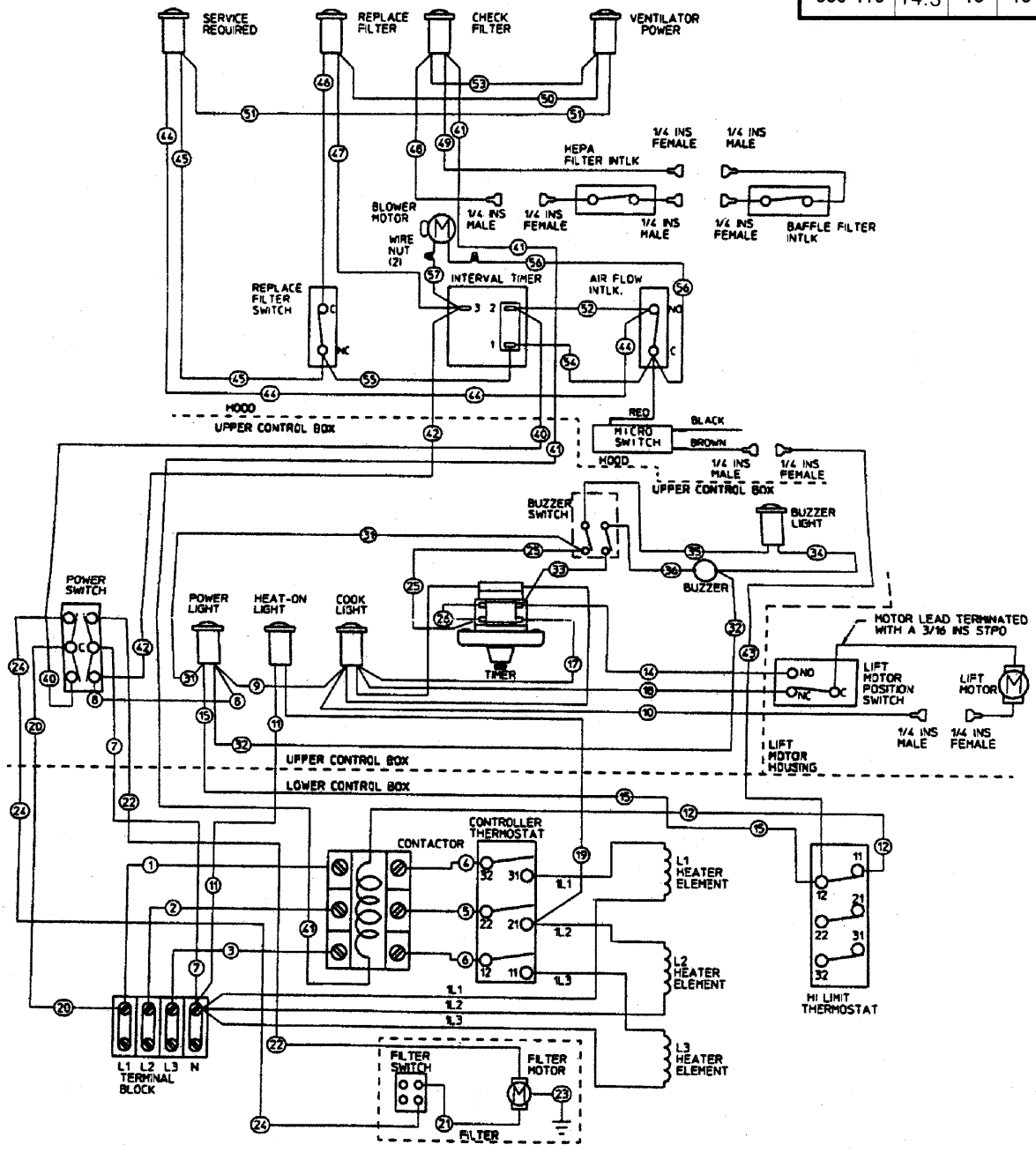
WIRING SCHEMATICS

VAE-30F 3Phase 208 or 240 V

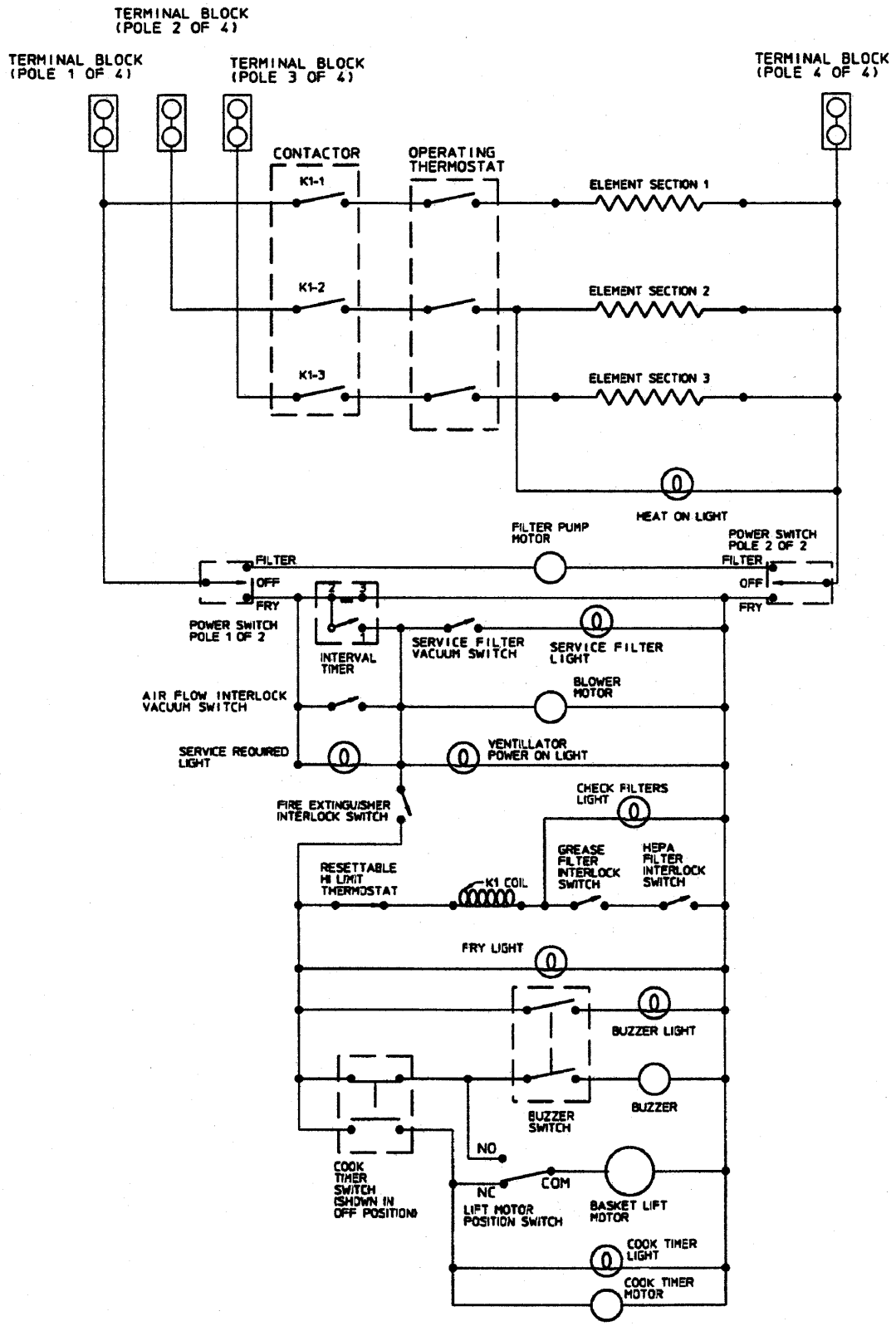


VAE-30F WIRING DIAGRAM
380 - 415 VAC 3∅ 3 WIRE + NEUTRAL

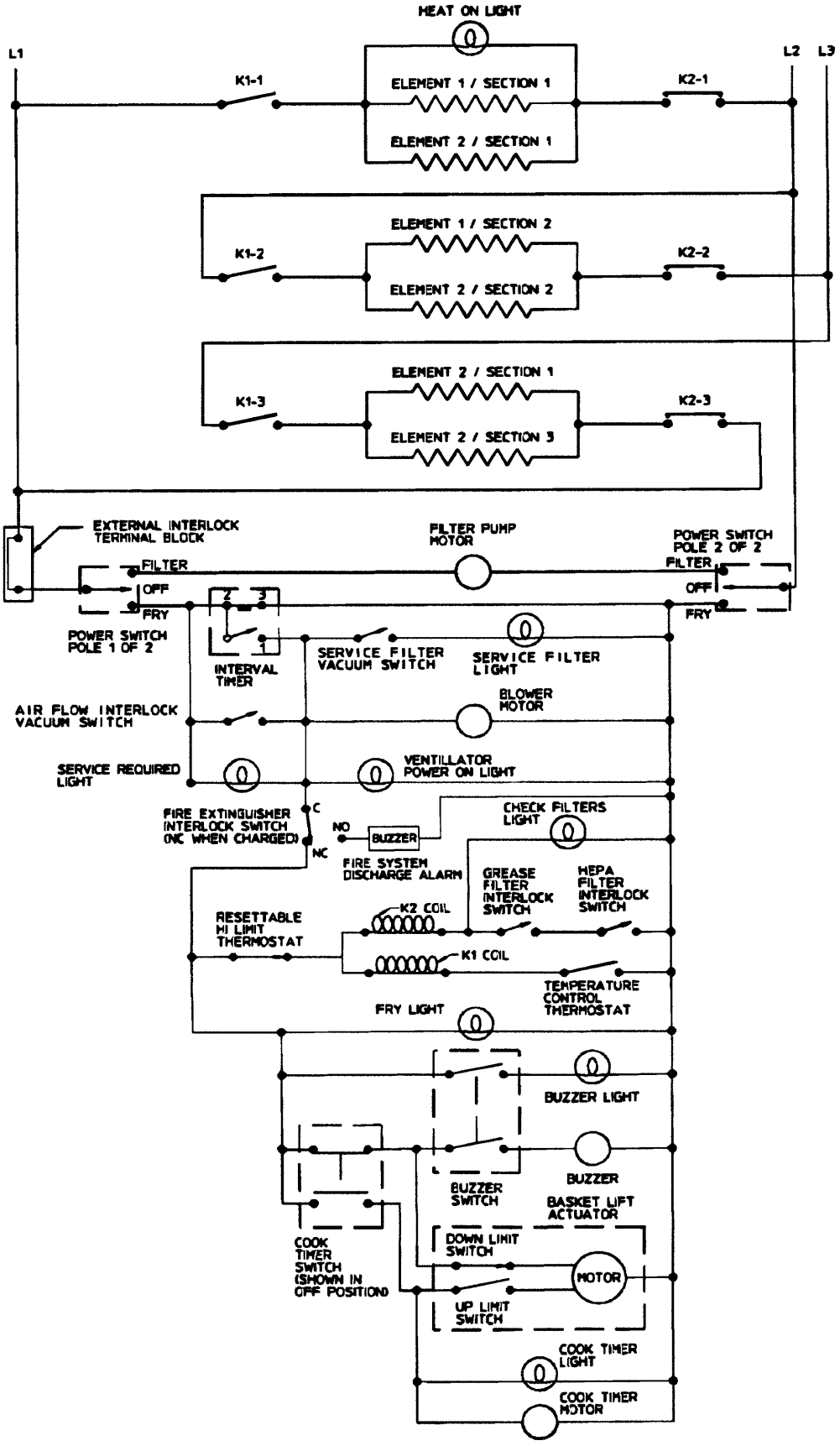
VOLTS 60 Hz	AMPS			
	L1	L2	L3	N
380-415	14.3	13	13	3



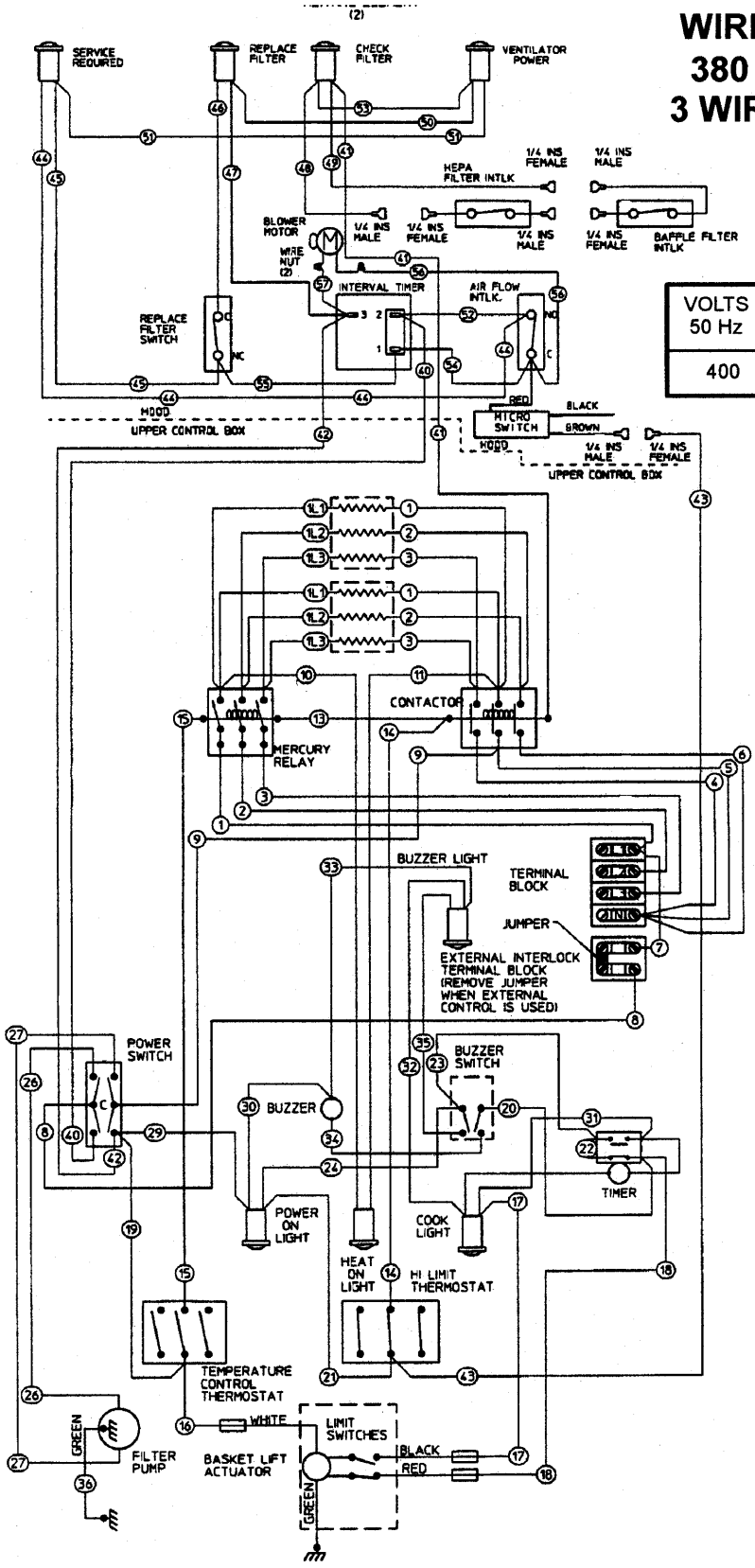
VAE-30F WIRING SCHEMATIC
380 - 415 VAC 3∅ 3 WIRE + NEUTRAL



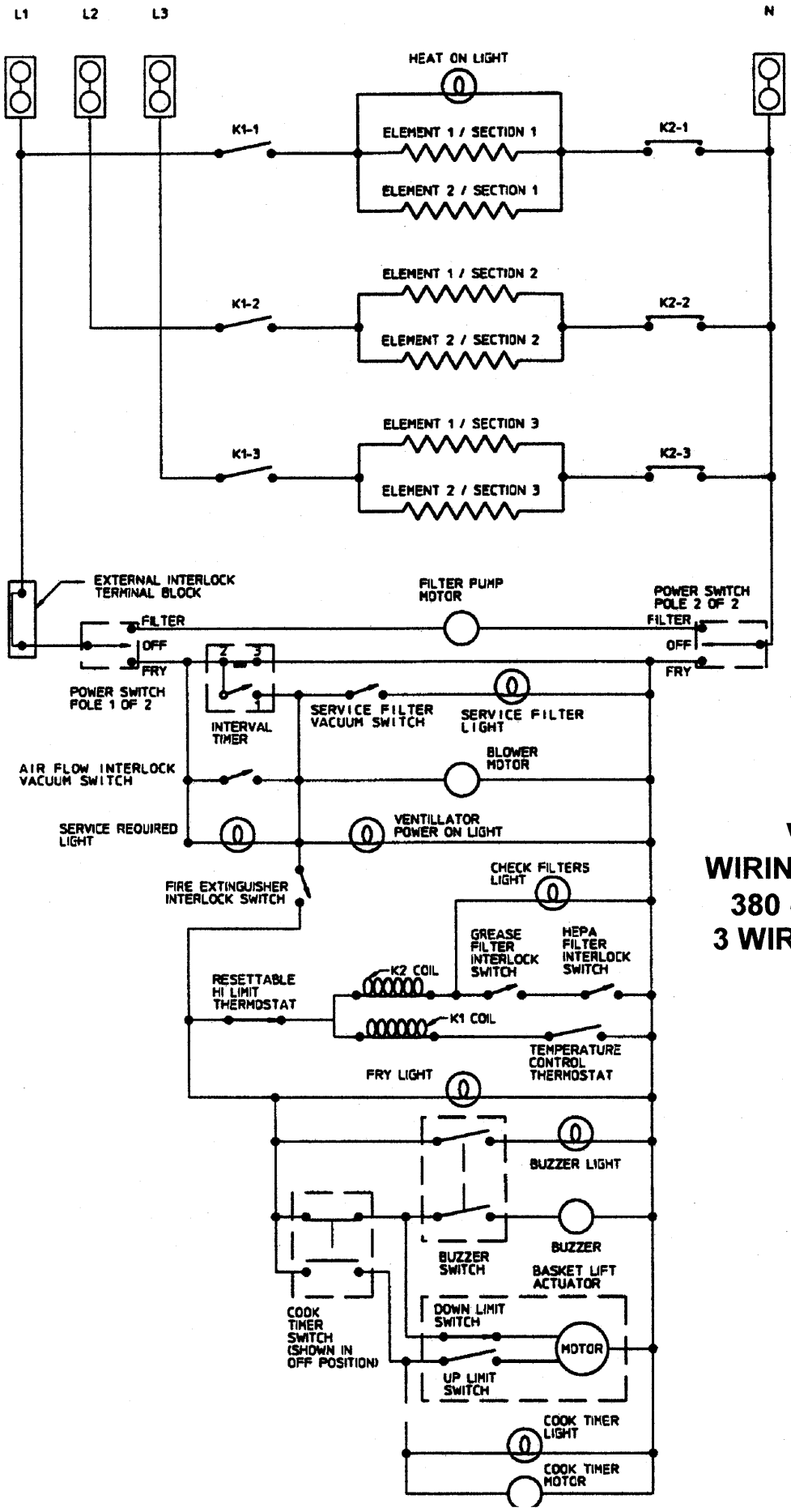
VAE-55F 3 Phase 208 or 240V



VAE-55F
WIRING DIAGRAM
380 - 415 VAC 3∅
3 WIRE + NEUTRAL

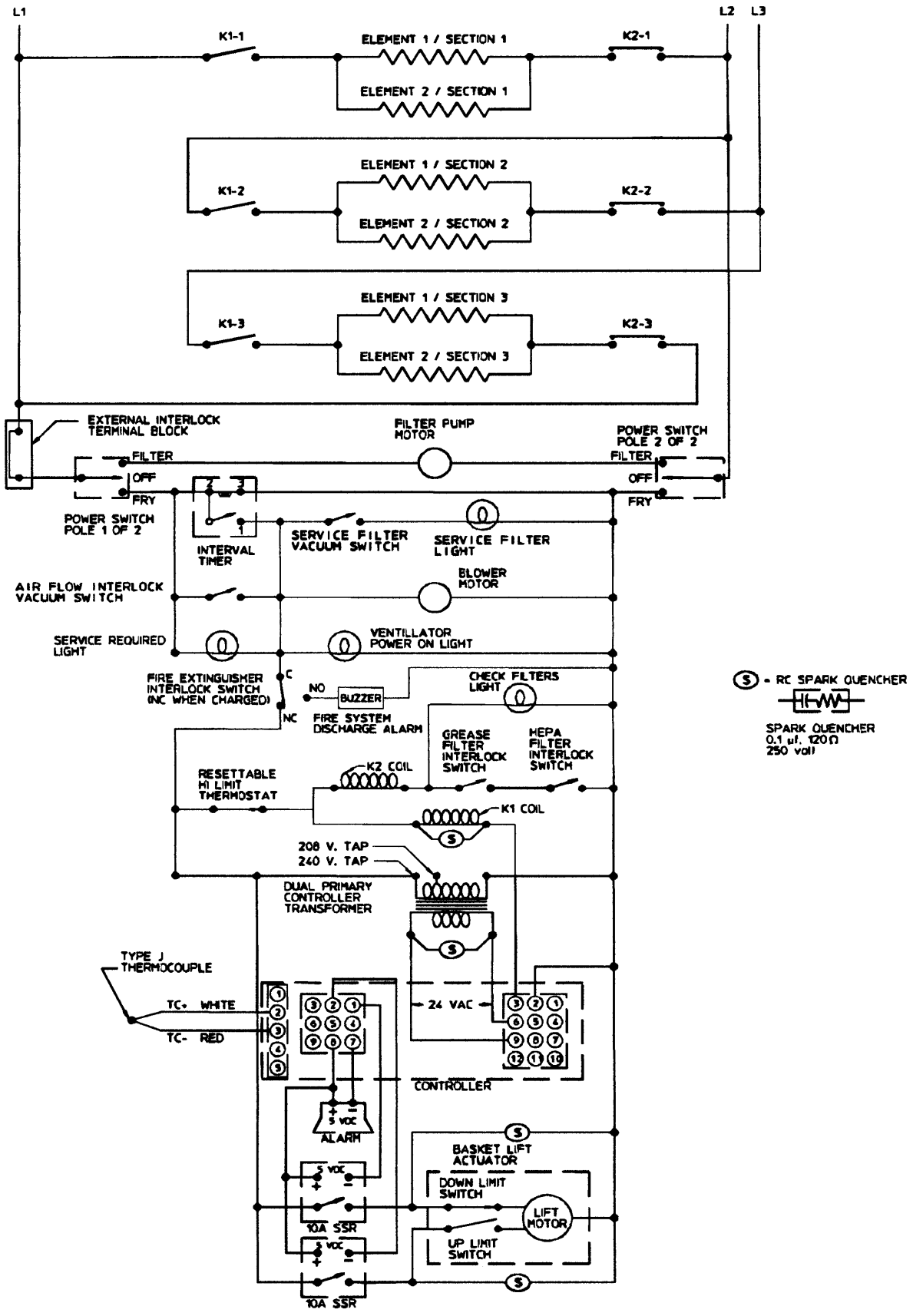


VOLTS 50 Hz	AMPS			
	L1	L2	L3	N
400	26	24	24	3

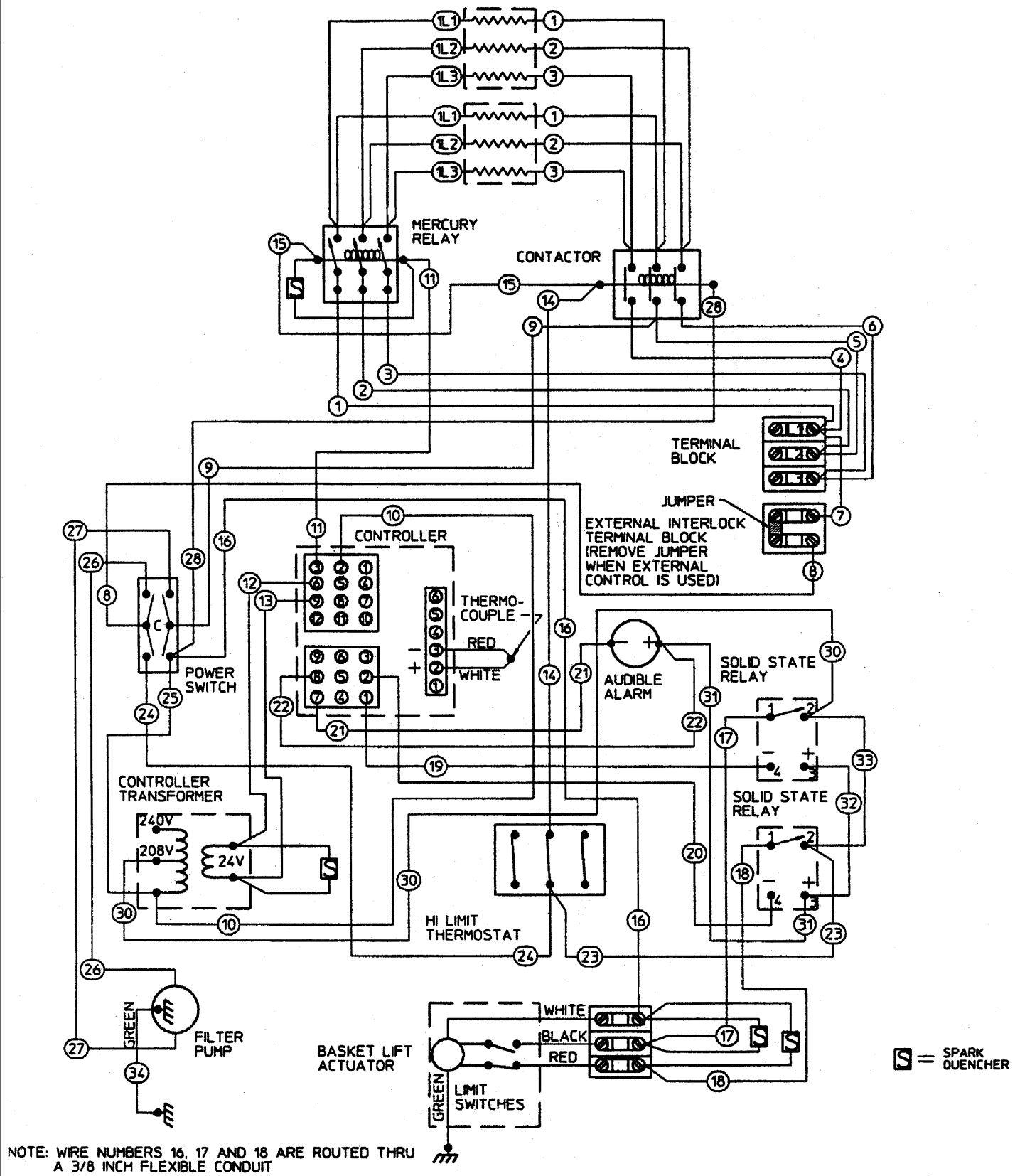


VAE-55F
WIRING SCHEMATIC
380 - 415 VAC 3∅
3 WIRE + NEUTRAL

VAE-55FS 3 Phase 208 or 240V



VAE-55FS
ELECTRICAL SCHEMATIC



NOTE: WIRE NUMBERS 16, 17 AND 18 ARE ROUTED THRU A 3/8 INCH FLEXIBLE CONDUIT

WIRE NUMBERS 26, 27, AND 34 ARE ROUTED THRU A 3/8 INCH FLEXIBLE CONDUIT

FRYER HOOD MAINTENANCE LOG

OPERATION	*Date/Agent*	*Date/Agent*	*Date/Agent*	*Date/Agent*	*Date/Agent*	*Date/Agent*	*Date/Agent*	*Date/Agent*	*Date/Agent*	*Date/Agent*	*Date/Agent*	*Date/Agent*	*Date/Agent*
Clean Plenum Grease Baffle and Blower (max. interval - 3 months)													
Replace HEPA Air Filter & Charcoal Air Filter (as required)													
☚ Inspect/Test Fire Suppression System (max. interval - 6 months)													
☚ Inspect/Test Filter Interlocks (max. interval: 6 months)													
☚ Replace Fusible Link in Flue Damper (max. interval: 12 months)													
☚ Replace Fusible Link in Hood Plenum (max. interval: 12 months)													
☚ Replace Fusible Link on Frypot (max. interval: 12 months)													
☚ Clean Discharge Nozzle in Plenum before Filters (max. interval: 12 months)													
☚ Clean Discharge Nozzle in Plenum after Filters (max. interval: 12 months)													
☚ Clean Manual Pull Station and any Remote Manual Station (max. interval: 12 months)													

☚ *To be Performed by Qualified Service Personnel Only.*

ANSUL® ANSUL INCORPORATED
MARINETTE, WI 54143-2542

MATERIAL SAFETY DATA SHEET

ANSULEX – R-102
QUICK IDENTIFIER (In Plant Common Name)

Manufacturer's Name:	ANSUL INCORPORATED	Emergency Telephone No.:	CHEMTREC (800) 424-9300 or (703) 527-3887
Address:	One Stanton Street, Marinette, WI 54143-2542	Other Information Calls:	(715) 735-7411
Prepared By:	Safety and Health Department	Date Prepared:	May 1, 1997

SECTION 1 – IDENTITY

Common Name: (used on label) (Trade Name and Synonyms)	ANSULEX R-102	CAS No.:	N/A
Chemical Name:	N/A This is a Mixture	Chemical Family:	Mixture
Formula:	N/A		Potassium Carbonate 35 584-08-7

SECTION 2 – INGREDIENTS

PART A – HAZARDOUS INGREDIENTS

Principal Hazardous Component(s) (chemical and common name(s)):	Wt. %	CAS No.	ACGIH TLV	Acute Toxicity Data
Oral LD_{50} (rat)				1870 mg/kg

PART B – OTHER INGREDIENTS

Other Component(s) (chemical and common name(s)):	Wt. %	CAS No.	ACGIH TLV	Acute Toxicity Data
Proprietary Mixtures of: Potassium Acetate	18	127-08-2		Oral LD_{50} (rat) 3250 mg/kg
Phenopthalein	2 ppm	77-09-8		ip LD_{50} (rat) 500 mg/kg
Water				

SECTION 3 – PHYSICAL AND CHEMICAL CHARACTERISTICS (Fire and Explosion Data)

Boiling Point:	113 °C			Specific Gravity (H_2O = 1):	1.43	Vapor Pressure (mm Hg):	Not Determined
Percent Volatile by Volume (%):	Approx. 50	Vapor Density (Air = 1):	1.03	Evaporation Rate (= 1):	0.13		
Solubility in Water:	100%			Reactivity in Water:	Mild exothermic reaction		
Appearance and Odor:	Pink colored liquid, mild odor.						
Flash Point:	None to boiling	Flammable Limits in Air % by Volume:	N/A	Extinguisher Media:	N/A	Auto-Ignition Temperature:	N/A
Special Fire Fighting Procedures:	NONE – THIS IS AN EXTINGUISHING AGENT						
Unusual Fire and Explosion Hazards:	None						

SECTION 4 – PHYSICAL HAZARDS

Stability:	Unstable ☐ Stable ☒	Conditions to Avoid:	N/A
Incompatibility (Materials to Avoid):	Reactive metals, electrically energized equipment, any material reactive with water.		
Hazardous Decomposition Products:	Not established, acrid fumes.		
Hazardous Polymerization:	May Occur ☐ Will Not Occur ☒	Conditions to Avoid:	N/A

SECTION 5 – HEALTH HAZARDS

Threshold Limit Value:	None Established
Routes of Entry: Eye Contact:	Irritant. Prolonged contact can cause chemical burns.
Skin Contact:	Irritant. prolonged contact can cause chemical burns.
Inhalation:	Not an expected route of entry. Can be irritating to mucous membranes.
Ingestion:	Irritating to mucous membranes.
Signs and Symptoms: Acute Overexposure:	Due to alkaline nature, material irritates skin, eyes, and all mucous membranes. Prolonged contact may cause skin burns.
Chronic Overexposure:	None known.
Medical Conditions Generally Aggravated by Exposure:	None known.
Chemical Listed as Carcinogen or Potential:	National Toxicology Program: Yes ☐ No ☒ — I.A.R.C. Monographs: Yes ☐ No ☒ — OSHA: Yes ☐ No ☒

SECTION 6 – EMERGENCY AND FIRST AID PROCEDURES

Eye Contact:	Flush and irrigate with water for 15 minutes while holding eyelids open. If irritation persists, seek Medical attention.
Skin Contact:	Wash thoroughly with soap and water; if irritation persists, seek Medical attention.
Inhalation:	Fresh air if symptoms occur. Seek Medical attention if irritation persists.
Ingestion:	Dilute by drinking large quantities of water.

SECTION 7 – SPECIAL PROTECTION INFORMATION

Respiratory Protection (Specify Type):	N/A		
Ventilation:	Local Exhaust: N/A	Mechanical (General):	N/A
Protective Gloves:	Rubber gloves for spill/leak.	Eye Protection:	Chemical goggles recommended during spill/leak procedures.
Other Protective Clothing or Equipment:	Eye wash and safety showers are good safety practice.		

SECTION 8 – SPECIAL PRECAUTIONS AND SPILL/LEAK PROCEDURES

Precautions to be Taken in Handling and Storage:	Store in original container. Keep tightly closed. Keep separate from acid.
Other Precautions:	See incompatibility information in Section 4.
Steps to be Taken in Case Material is Released or Spilled:	Stop leaks. Contain Spill. Remove as much as possible. Place in closed container for proper disposal. Wash spill area with large amounts of water to remove traces and neutralize.
Waste Disposal Methods:	Dispose of in compliance with local, state, and federal regulations.

HAZARDOUS MATERIAL IDENTIFICATION SYSTEM RATINGS

HAZARD INDEX:
4 Severe Hazard
3 Serious Hazard
2 Moderate Hazard
1 Slight Hazard
0 Minimal Hazard

1 HEALTH
0 FLAMMABILITY
0 REACTIVITY

N/A = Not Applicable NDA = No Data Available

ANSUL and ANSULEX are registered trademarks.

Transportation Damage and Claims

All Alto-Shaam equipment is sold F.O.B. shipping point, and when accepted by the carrier, such shipments become the property of the consignee.

Should damage occur in shipment, it is a matter between the carrier and the consignee. In such cases, the carrier is assumed to be responsible for the safe delivery of the merchandise, unless negligence can be established on the part of the shipper.

1. Make an immediate inspection while the equipment is still in the truck or immediately after it is moved to the receiving area. Do not wait until after the material is moved to a storage area.

2. Do not sign a delivery receipt or a freight bill until you have made a proper count and inspection of all merchandise received.

3. Note all damage to packages directly on the carrier's delivery receipt.

4. Make certain the driver signs this receipt. If he refuses to sign, make a notation of this refusal on the receipt.

5. If the driver refuses to allow inspection, write the following on the delivery receipt:
   Driver refuses to allow inspection of containers for visible damage.

6. Telephone the carrier's office immediately upon finding damage, and request an inspection. Mail a written confirmation of the time, date, and the person called.

7. Save any packages and packing material for further inspection by the carrier.

8. Promptly file a written claim with the carrier and attach ***copies*** of all supporting paperwork.

We will continue our policy of assisting our customers in collecting claims which have been properly filed and actively pursued. We cannot, however, file any damage claims for you, assume the responsibility of any claims, or accept deductions in payment for such claims.

Record the model and serial numbers of the unit for easy reference. Always refer to both model and serial numbers in your correspondence regarding the unit.

Model: _____

Serial Number: _____

Purchased From: _____

Date Installed: _____ Voltage: _____

ALTO-SHAAM®

Fryer • Original Equipment Limited Warranty

Alto-Shaam, Inc. warrants to the original purchaser that any original part that is found to be defective in material or workmanship will, at our option, subject to provisions hereinafter stated, be replaced with a new or rebuilt part.

The labor warranty remains in effect one (1) year from installation or fifteen (15) months from the shipping date, whichever occurs first. Alto-Shaam will bear normal labor charges performed during standard business hours not subject to overtime, holiday rates, or any additional fees.

The parts warranty remains in effect one (1) year from installation or fifteen (15) months from the shipping date, whichever occurs first.

This warranty does not apply to:

1. Safety thermostat, circuit breaker and overload protector reset or fuse replacement unless specifically warranted.
2. Any and all malfunction due to operation at voltages other than specified on the equipment. Conversion to correct voltage and phase are the responsibility of the purchaser.
3. Any and all problems due to electrical connections not in accordance with electrical code requirements and the wiring diagrams supplied with the equipment.
4. Calibration of heat controls on original components after the first sixty (60) days.
5. Replacement of items subject to normal wear. Such items include but are not limited to knobs, light bulbs, baskets, grids, mechanical timers, thermocouples, fuses and indicating lights.
6. Normal maintenance functions including lubrication, adjustments of air-flow, thermostats, door mechanisms, microswitches, burners and pilot burners.
7. Installation labor, inspection, and start-up are not considered warranty items.
8. Charges incurred by delays or operational restrictions which hinder the ability of a service technician to perform service are not covered by warranty.
9. Equipment damage caused by accident, shipping, improper installation or alteration.
10. Equipment used under conditions of abuse, misuse, carelessness or abnormal conditions including equipment subjected to harsh or inappropriate chemicals, poor water quality or equipment with missing or altered serial numbers.
11. Any losses or damages resulting from malfunction, including loss of product or consequential or incidental damages of any kind.
12. Equipment modified in any manner from original model, substitution of parts other than factory authorized parts, removal of any parts or addition of any parts.

Alto-Shaam factory authorized replacement parts are warranted for ninety (90) days from date of purchase on non-warranty equipment. Replacement parts warranty is limited to the defective part only. The use of parts other than factory authorized Alto-Shaam replacement parts completely voids warranty coverage.

This warranty is exclusive and is in lieu of all other warranties, expressed or implied, including the implied warranties of merchantability and fitness for purpose. In no event shall the Company be liable for loss of use, loss of revenue, or loss of product or profit, or for indirect or consequential damages. This warranty is in lieu of all other warranties expressed or implied and Alto-Shaam, Inc. neither assumes or authorizes any persons to assume for it any other obligation or liability in connection with Alto-Shaam equipment.

COOK/HOLD/SERVE SYSTEMS BY ALTO-SHAAM®

W164 N9221 Water Street • P.O. Box 450 • Menomonee Falls, Wisconsin 53052-0450 • U.S.A.

PHONE: 262.251.3800 800.558.8744 U.S.A./CANADA

FAX: 262.251.7067 • 800.329.8744 U.S.A./CANADA 262.251.1907 INTERNATIONAL

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